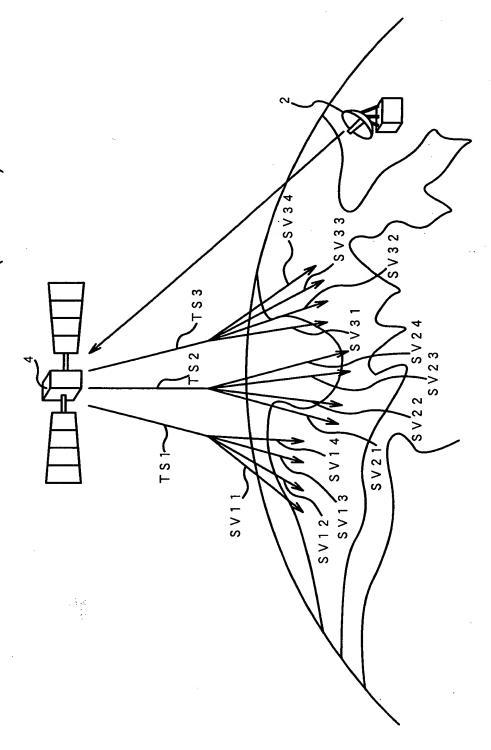
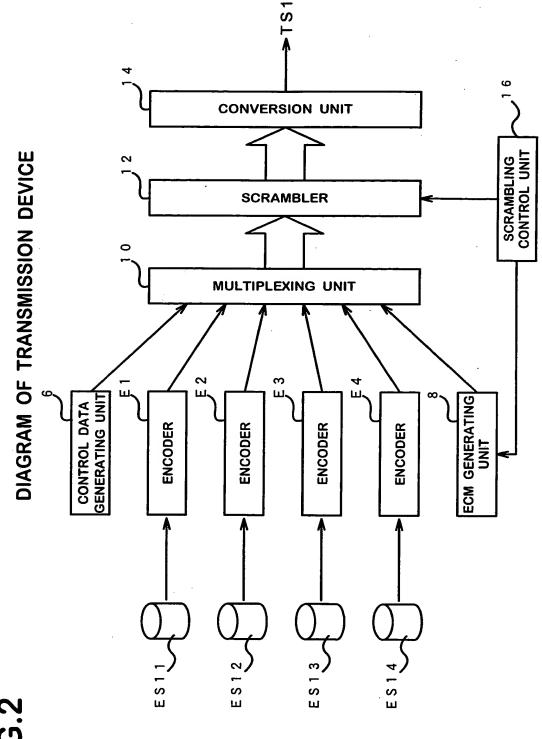
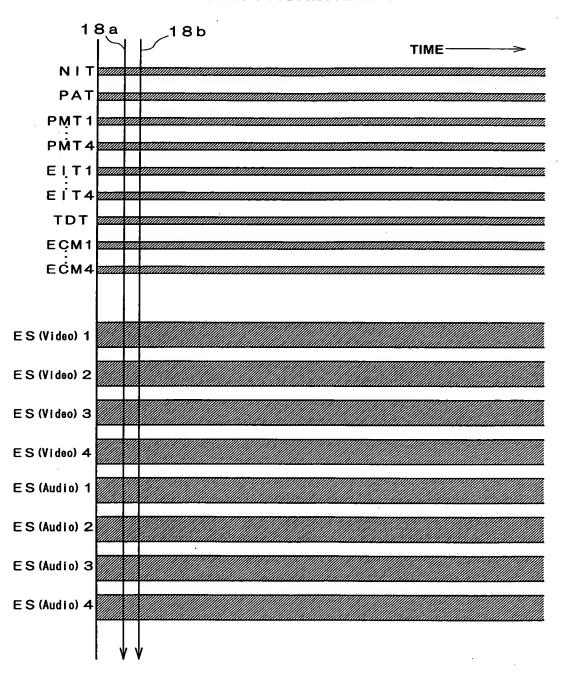
FIG.

TRANSMISSION OF ELECTROMAGNETIC WAVES IN SATELLITE BROADCAST (DIAGRAM)





DATA PACKETIZATION



STRUCTURE OF PACKETIZED DATA

PID CONTENT DATA

PMT1 $(PID=0\times11)$

VIC	EO	AUDIO		
PID OF ECM	PID OF ES	PID OF ECM	PID OF ES	
0×21	0×22	0×21	0×24	

PAT $(PID=0\times00)$

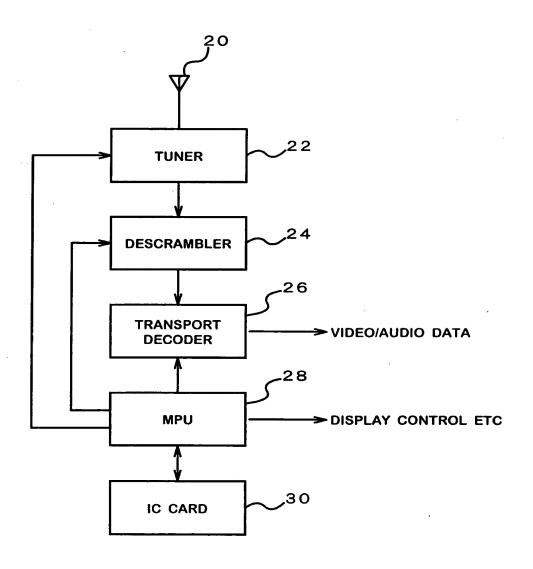
SERVICE	PID OF PMT
SV11	0×0011
SV12	0×0012
SV13	0×0013
SV14	0×0014

PID	OF	NIT
0	×1	8

NIT $(PID=0\times18)$

TS	TRANSMISSION PARAMETERS	SERVICE LIST			
TS1	f 1 ····	SV11, SV12, SV13, SV14			
TS2	f 2	SV21, SV22, SV23, SV24			
-	1	;			

DIAGRAM OF RECEPTION DEVICE



9.0 0.0



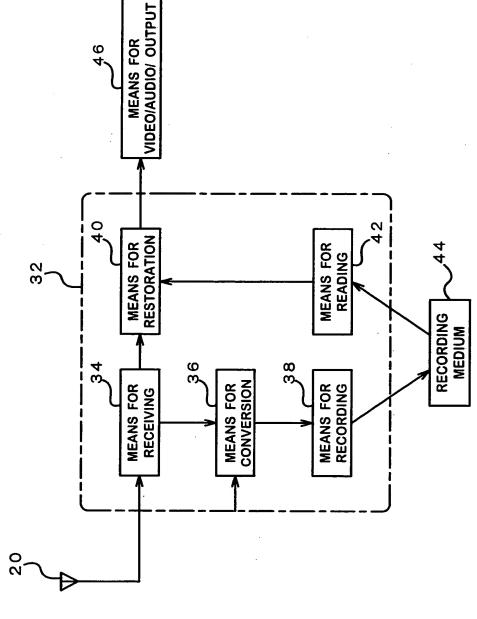
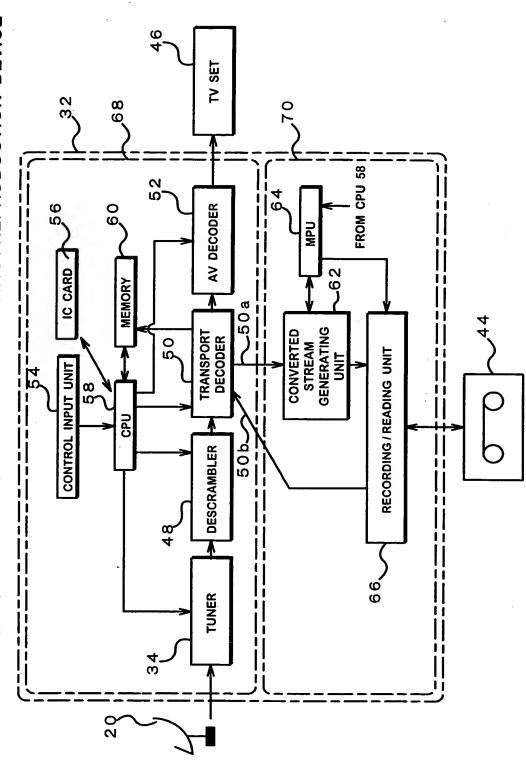
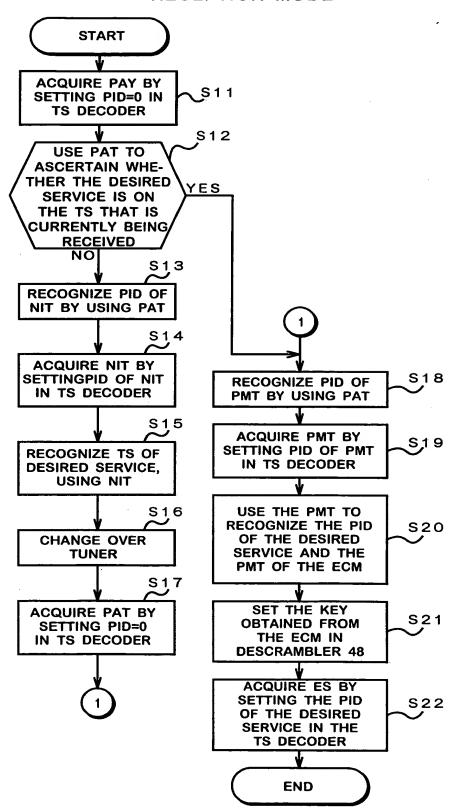


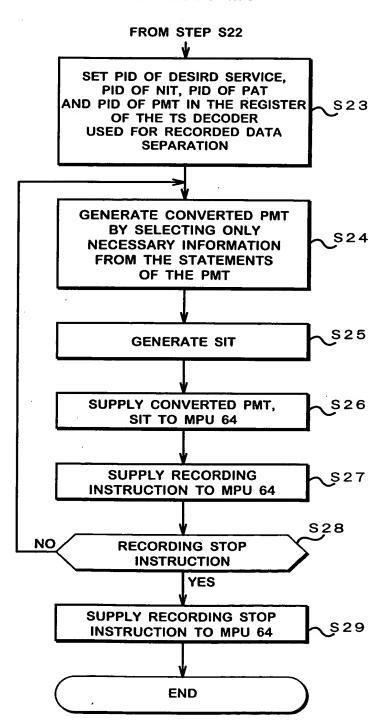
FIG.10 BLOCK DIAGRAM OF RECEPTION/RECODING/REPRODUCTION DEVICE



RECEPTION MODE



RECORDING MODE



CONVERTED STREAM RECORDED ON RECORDING MEDIUM

SIT	CONVERTED PAT	CONVERTED PMT	ES(V)	ES(V)	ES(V)	ES(A)	ES(A)	SIT	CONVERTED PAT	CONVERTED PMT		- 1
-----	---------------	---------------	-------	-------	-------	-------	-------	-----	---------------	---------------	--	-----

CONVERTED STREAM	D I CONVERTED STREA	M
------------------	---------------------	---

REPRODUCTION MODE

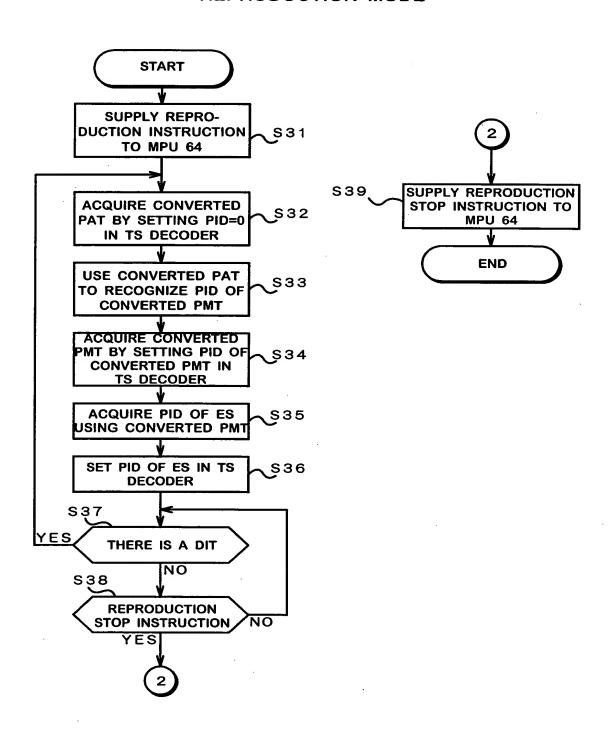
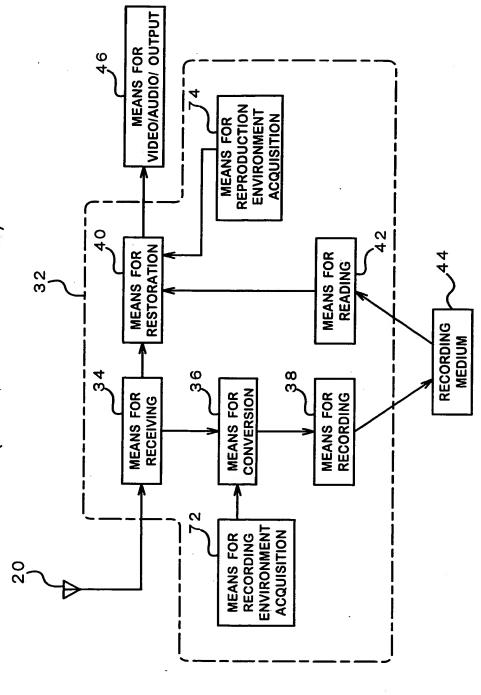
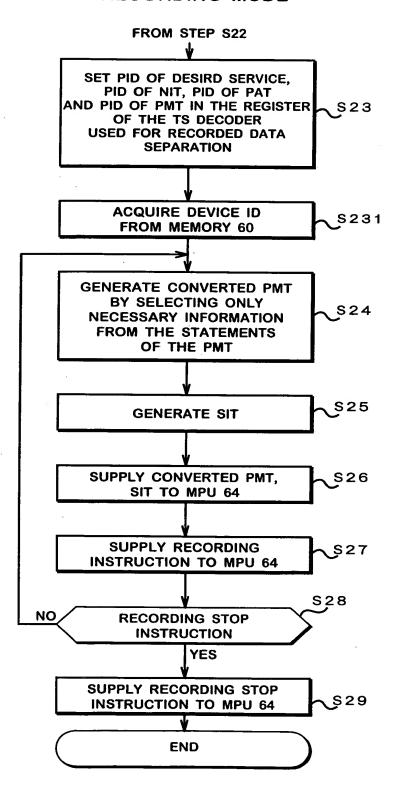


FIG.16

OVERALL LAYOUT DIAGRAM OF
RECEPTION/RECORDING/REPRODUCTION DEVICE
(SECOND EMBODIMENT)

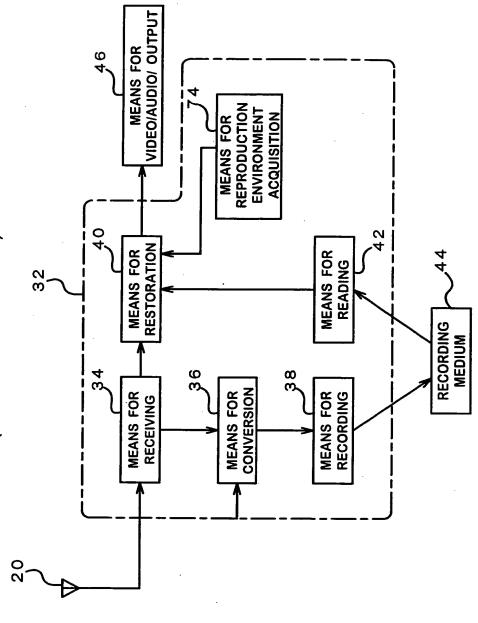


RECORDING MODE



REPRODUCTION MODE START SUPPLY REPRO-DUCTION INSTRUCTION S31 TO MPU 64 S39 SUPPLY REPRODUCTION **ACQUIRE CONVERTED** STOP INSTRUCTION TO S32 PAT BY SETTING PID=0 **MPU 64** IN TS DECODER **END USE CONVERTED PAT S33** TO RECOGNIZE PID OF **RECOGNIZE PID OF THE** S321 **CONVERTED PMT** SIT USING CONVERTED PAT ACQUIRE CONVERTED PMT BY SETTING PID OF **S34 ACQUIRE SIT BY SETTING** CONVERTED PMT IN S322 PID OF SIT IN TS DECODER TS DECODER ACQUIRE PID OF ES **S35** JSING CONVERTED PMT ACQUIRE DEVICE ID S323 STATED IN SIT SET PID OF ES IN TS **S36 DECODER** READ ID OF THE DEVICE S324 **ITSELF FROM MEMORY 60 S37** S325 DOES THE DEVICE THERE IS A DIT NO **ID AGREE?** NO YEŞ **S38** REPRODUCTION INSTRUCT AV STOP INSTRUCTION **DECODER 52 TO DIS-**YES PLAY A MESSAGE TO **S326** THE EFFECT THAT RE-PRODUCTION CANNOT **BE PERFORMED WITH** THIS DEVICE

OVERALL LAYOUT DIAGRAM OF RECEPTION/RECORDING/REPRODUCTION DEVICE (THIRD EMBODIMENT)



DATA PACKETIZATION

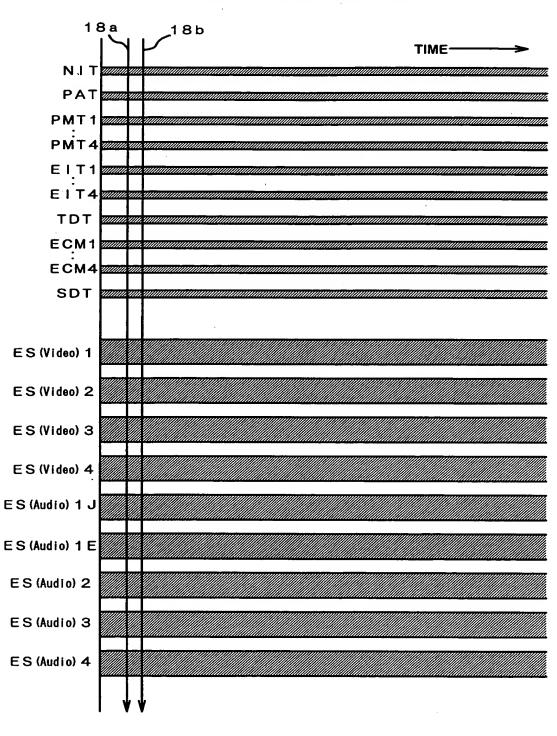
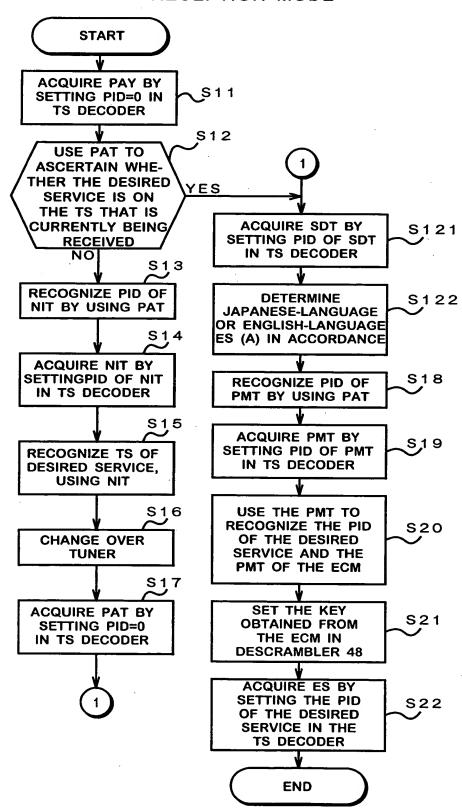


FIG.21

RECEPTION MODE



RECORDING MODE

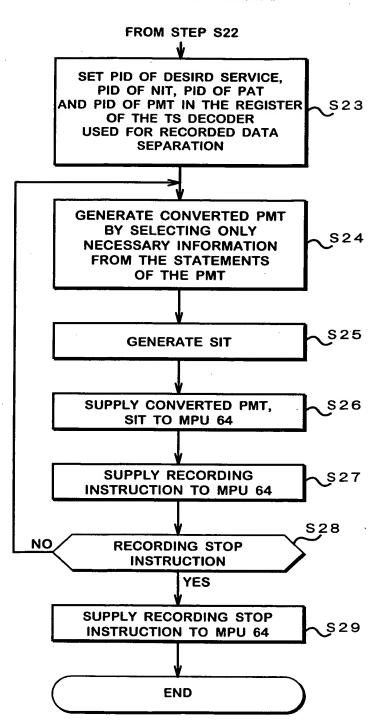
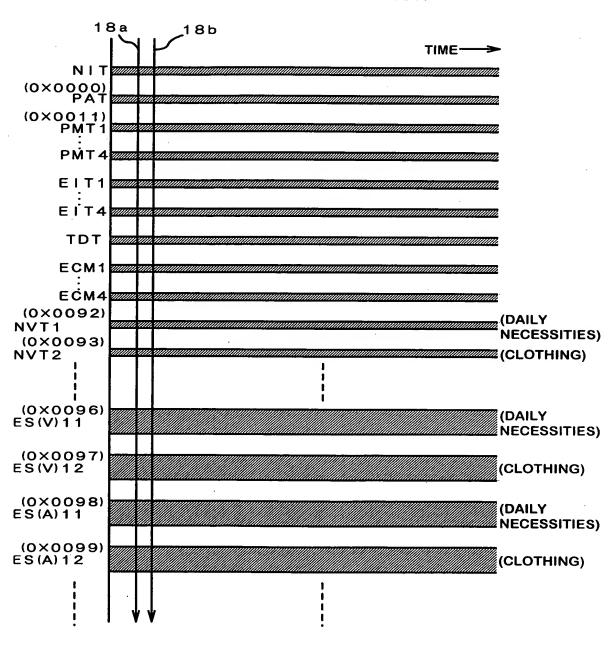


FIG.23

REPRODUCTION MODE **START** SUPPLY REPRO-DUCTION INSTRUCTION S31 TO MPU 64 **S39** SUPPLY REPRODUCTION ACQUIRE CONVERTED STOP INSTRUCTION TO S32 **MPU 64** PAT BY SETTING PID=0 IN TS DECODER **END USE CONVERTED PAT S33** TO RECOGNIZE PID OF RECOGNIZE PID OF THE S321 CONVERTED PMT SIT USING CONVERTED PAT ACQUIRE CONVERTED PMT BY SETTING PID OF **§34** ACQUIRE SIT BY SETTING CONVERTED PMT IN S322 PID OF SIT IN TS DECODER TS DECODER ACQUIRE PID OF ES S35 JSING CONVERTED PMT ACQUIRE PID OF **S327** JAPANESE-LANGUAGE ES (A) AND ENGLISH-SET PID OF ES IN TS S36 LANGUAGE ES (A) STATED **DECODER** IN THE SIT **S37** READ PLACE OF **INSTALLATION** \$328 THERE IS A DIT **INFORMATION OF THIS DEVICE FROM MEMORY 60** NO S38 SELECT PID OF ES (A) OF REPRODUCTION LANGUAGE MATCHING OF **S329** STOP INSTRUCTION / THE PLACE OF **INSTALLATION** YES

DATA PACKETIZATION



PMT1 $(PID=0\times0011)$

PACKET ID CORRESPONDENCE

	PID OF ES	PID OF ECM
VIDEO	0×0096	0×0082
VIDEO	0×0097	0×0082
AUDIO	0×0098	0×0082
AUDIO	0×0099	0×0082
NAVIGATION	0×0092	0×0082
DATA	0×0093	0×0082

NVT1 NVT2

ES (V) 11

ES (V) 12 ES (A) 11 ES (A) 12

ENTRY CONTENT

VIDEO	AUDIO	NAVIGATION DATA	
0×0096	0×0098	0×0092	

ES (V) 11 ES (A) 11 NVT1

PAT (PID=0×0000)

SERVICE	PID OF PMT
SV11	0×0011
SV12	0×0012
SV13	0×0013
SV14	0×0014

NAVIGATION DATA NVT1

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FOCUS	-	ဇ	5
NORMAL	0	2	4
HANDLER	0	1	2
⋆	200	400	009
×	200	200	500
INDEX TYPE	BUTTON 500 200	BUTTON 500400	BUTTON 500 600
INDEX	0	1	2

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NDLER DEFINITION TABL

ויייולורוי ר	INVOCEN DETINITION TABLE
INDEX	INSTRUCTION (SCRIPT)
0	
	send_string(index O, index 2)
τ-	
	send_string(index 1, index 2)

BITMAP TABLE INDEX

INDEX	DATA (BITMAP DATA)
0	ORDER FROM OSAKA CENTER
1	ORDER FROM OSAKA CENTER
2	ORDER FROM TOKYO CENTER
3	ORDER FROM TOKYO CENTER
4	GO TO CLOTHING SHOP
3	CO TO CLOTHING SHOP

CHARACTER SEQUENCE TABLE

goto_contents(index 1)

שייייייייייייייייייייייייייייייייייייי	CHARACTER SEQUENCE	XXXX-89E9-90	03-1234-XXXX	PRODUCT CODE:A-395
	INDEX	0	1	2

NAVIGATION DATA NVT2

ı		l
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FOCUS CONDITION	1	ဗ	5
NORMAL CONDITION	0	2	4
HANDLER	0	1	2
Υ	200	400	009
×	200	500	200
TYPE	BUTTON 500 200	BUTTON 500 400	BUTTON 500 600
INDEX	0	1	2

HIPER LINK TABLE

INDEX	VIDEO	AUDIO	NAVIGATION DATA
0	9600×0	8600x09600x0	0×0092
1	0×0097	6600×0/2600×0	0×0093

HANDLER DEFINITION TABLE

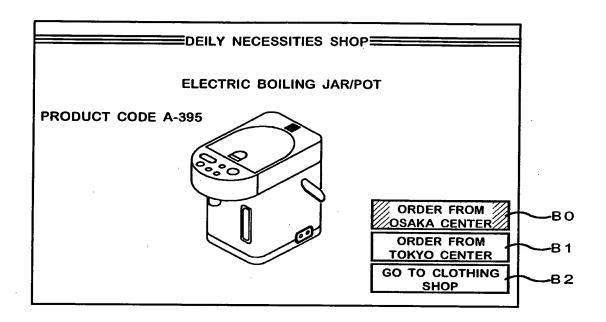
וואווסיי ואוווסיי ואפרב	INDEX INSTRUCTION (SCRIPT)	send_string(Index O, index 2)	7-	send_string(index 1, index 2)	2 goto contents (index O)
	Q N	 	-		Z

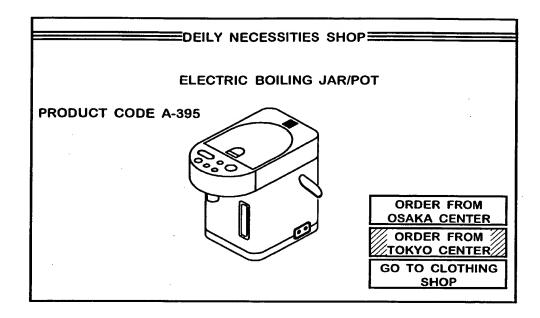
BITMAP TABLE INDEX

INDEX	DATA (BITMAP DATA)
0	ORDER FROM OSAKA CENTER
 1	ORDER FROM OSAKA CENTER
 2	ORDER FROM TOKYO CENTER
3	MORDER FROM TOKYO CENTER
 4	GO TO DAILY NECESSITIES SHOP
ည	GO TO DAILY NECESSITIES SHOP

CHARACTER SEQUENCE TABLE

	טווווווווווווווווווווווווווווווווווווו
INDEX	CHARACTER SEQUENCE
0	06-6368-XXXX
1	03-1234-XXXX
2	PRODUCT CODE:B-133





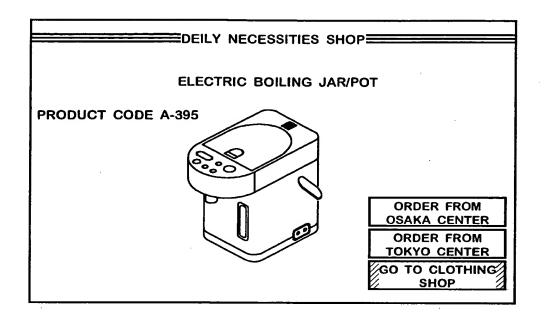


FIG.32

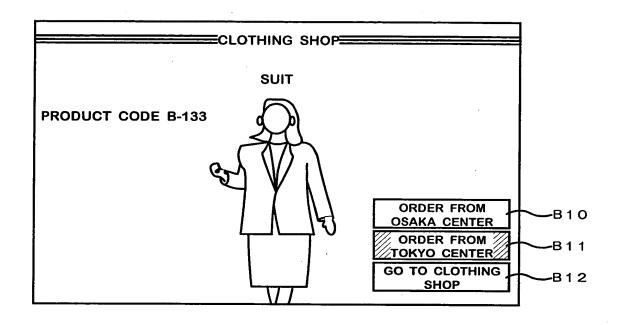
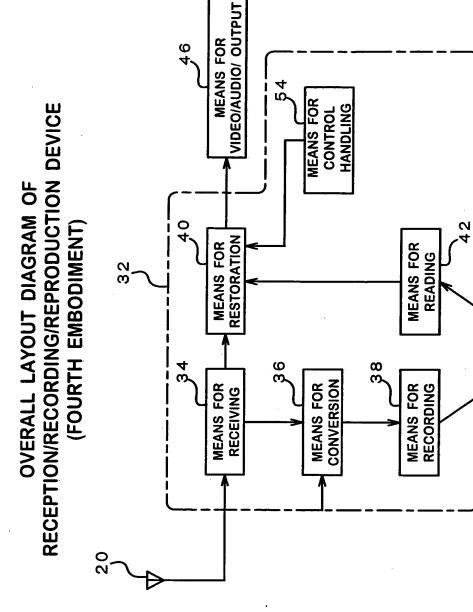


FIG.33



RECORDING MEDIUM

BLOCK DIAGRAM OF RECEPTION/RECODING/REPRODUCTION DEVICE FIG.34

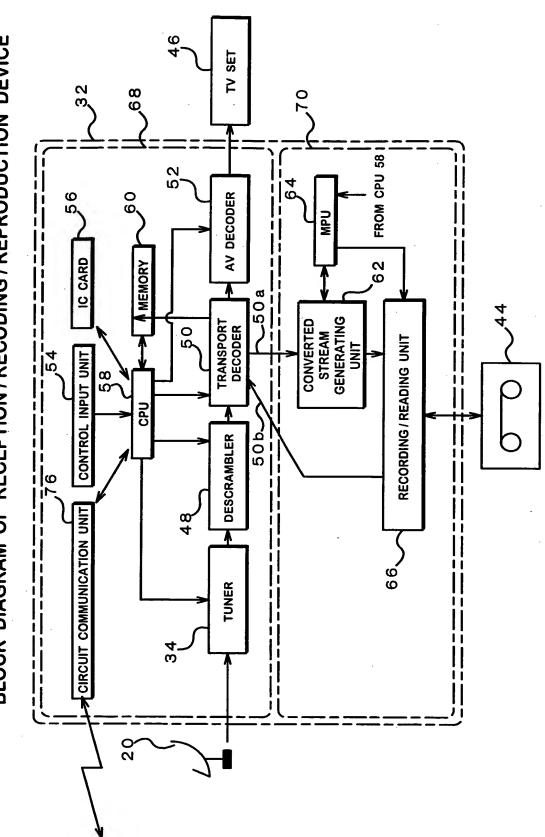
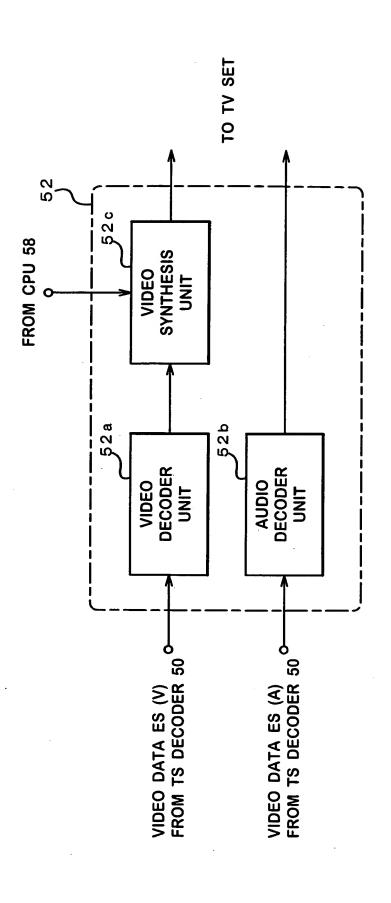
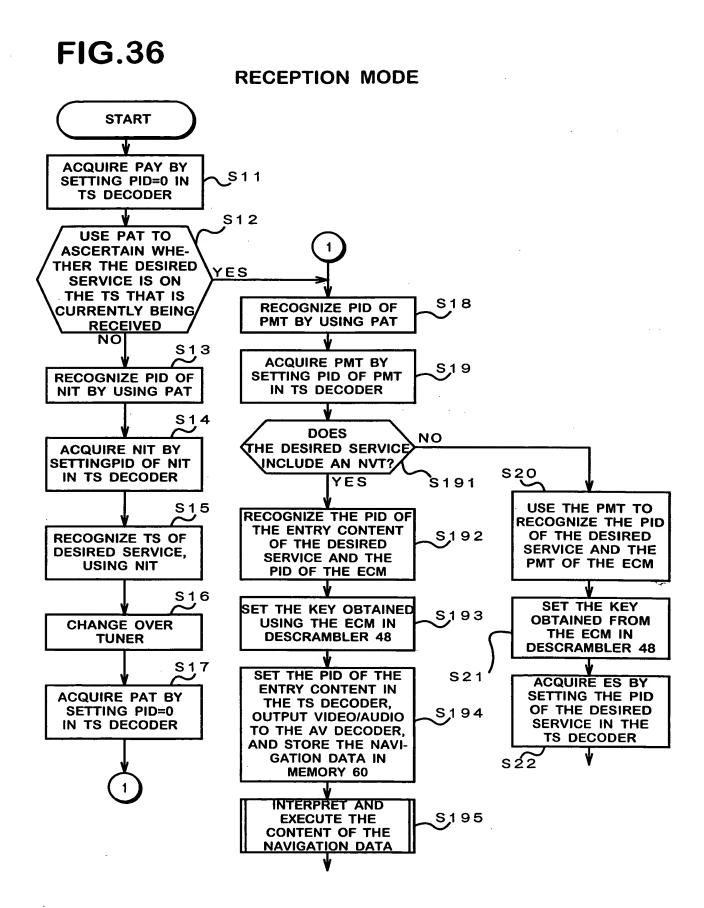


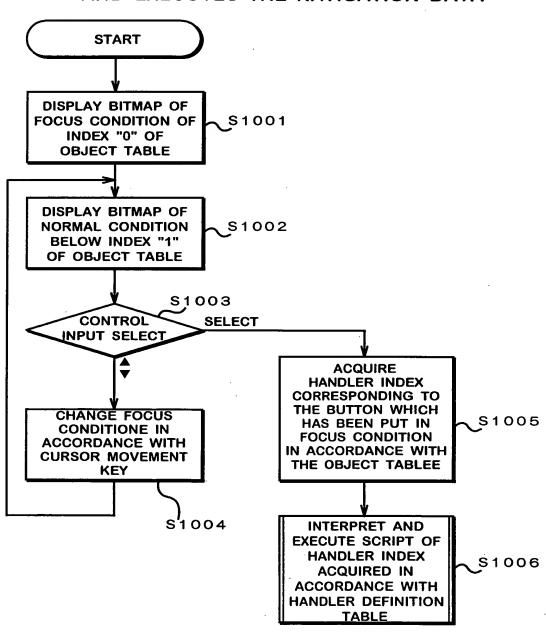
FIG.35

DETAILS OF AV DECODER 52

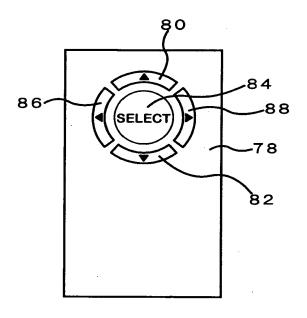




FLOW CHART OF PROGRAM THAT INTERPRETS AND EXECUTES THE NAVIGATION DATA



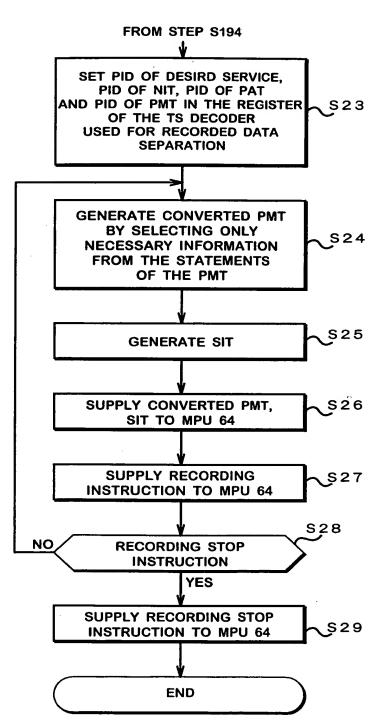
EXTERNAL APPEARANCE REMOTE CONTROLLER



	DATE AND TIME	TELEPHONE NUMBER	RESULT	MODE
-	1998/8/1	06-123-XXXX	0	RECEPTION
2	1998/8/10	1998/8/10 03-9876-XXXX	0	RECEPTION
ဗ	1998/8/25	1998/8/25 052-111-XXXX	×	REPRODUCTION
	·			

ONLINE LOG

RECORDING MODE



CONVERTED PMT(PID=0×0011)

PACKET ID CORRESPONDENCE

	PID OF ES	
VIDEO	0×0096	ES (V) 11
VIDEO	0×0097	ES (V) 12
AUDIO	0×0098	ES (A) 11
AUDIO	0×0099	ES (A) 12
NAVIGATION	0×0092	NVT1
DATA	0×0093	NVT2

ENTRY CONTENT

VIDEO	AUDIO	NAVIGATION DATA
0×0096	0×0098	0×0092

ES (V) 11 ES (A) 11 NVT1

CONVERTED PAT (PID=0×000)

SERVICE	PID OF CONVERTED PMT
SV11	0×0011

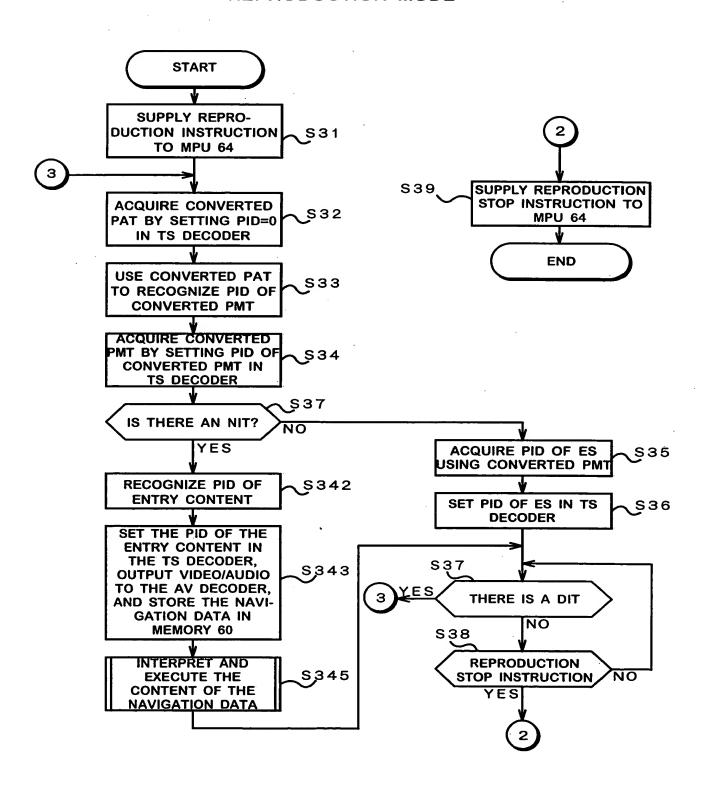
PID OF SIT	
0×0018	_

CONVERTED STREAM RECORDED ON RECORDING MEDIUM

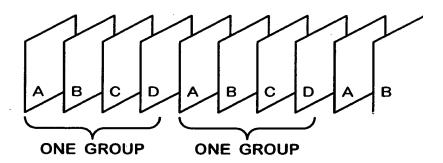
SIT CONVERTED PAT CONVERTED PMT NVT1 ES(V)11 ES(V)12 ES(V)12 ES(A)11 ES(A)11 ES(A)11 CONVERTED PAT CONVERTED PMT NVT1 NVT1

FIG.44

REPRODUCTION MODE



ES OF STATIONARY IMAGE



NAVIGATION DATA NVT1

ı	ì	ı	
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	<u>z</u>		
FOCUS	1	၉	ဌ
NORMAL CONDITION	0	7	4
HANDLER	0	1	2
\	200	400	009
×	500	500	200
TYPE	BUTTON 500 200	BUTTON 500 400	BUTTON 500 600
NDEX	0	1	2

PER LINK TABLE

NAVIGATION DATA	0×0092	0×0093	
NAVIC D/			
AUDIO	8600×0	6600×0	
VIDEO	8600x0 9600x0	6600×0/1600×0	
INDEX	0	1	

HANDLER DEFINITION TABLE

	σ	8	
INDEX INSTRUCTION (SCRIPT)	if MODE=REPRODUCTION then get_record_time Tr get_current_time Tc if Tc_Tr<10800 then send_string(index 0, index 2) endif if MODE=RECEPTION OR RECORDING then send_string(index 0, index 2)	f MODE=REPRODUCTION then get_record_time Tr get_current_time Tc if Tc_Tr<10800 then send_string(index 1, index 2) end!f MODE=RECEPTION OR RECORDING then send_string(index 1, index 2)	goto_contents (index 1)
<u>.</u>	1	1	
INDEX	0		2

BITMAP TABLE INDEX

DAIA (BIIMAP DAIA)	ORDER FROM OSAKA CENTER	ORDER FROM OSAKA CENTER	ORDER FROM TOKYO CENTER	ORDER FROM TOKYO CENTER	GO TO CLOTHING SHOP	GO TO CLOTHING SHOP
INDEA	0	1	2	8	4	2

INDEX	CHARACTER SEQUENCE
0	XXXX-89E9-90
1	03-1234-XXXX
2	PRODUCT CODE:A-395

NAVIGATION DATA NVT2

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INDEX	JDEX TYPE	×	⋆	HANDLER	NORMAL CONDITION	FOCUS CONDITION
0	BUTTON 500 200	200	200	0	0	1
1	BUTTON 500 400	500	400	1	2	3
2	BUTTON 500 600	500	009	2	4	2

HIPER LINK TABLE

8600X0	6600X07600X0	2600×0	1
0×0092	0×009600×0	0×0096	0
NAVIGATION DATA	AUDIO	VIDEO	INDEX

HANDLER DEFINITION TABLE

INDEX	INSTRUCTION (SCRIPT)
0	if MODE=REPRODUCTION then get_record_time Tr get_current_time Tc if Tc_Tr<10800 then send_string(index 0, index 2)
	if MODE=RECEPTION OR RECORDING then send_string(index O, index 2)
	If MODE=REPRODUCTION then get_record_time Tr
-	lf Tc_Tr<10800 then send_string(index 1, index 2)
	If MODE=RECEPTION OR RECORDING then send_string(index 1, index 2)
2	goto_contents (indexO)

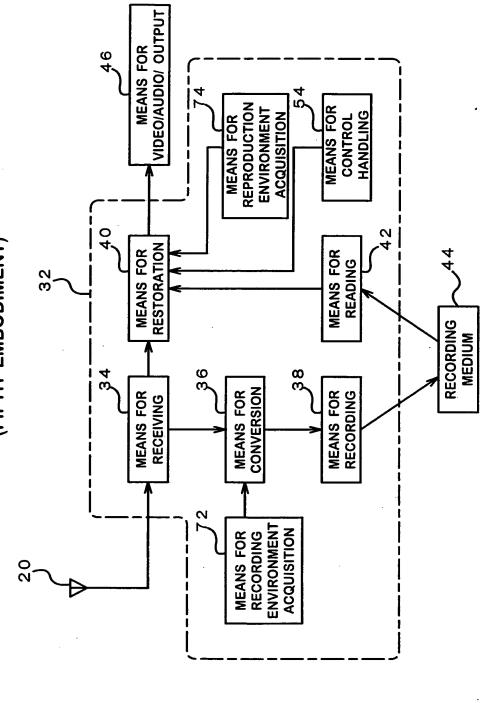
BITMAP TABLE

INDEX	DATA (BITMAP DATA)
0	ORDER FROM OSAKA CENTER
1	ORDER FROM OSAKA CENTER
2	ORDER FROM TOKYO CENTER
3	WORDER FROM TOKYO CENTER
4	GO TO DAILY NECESSITIES SHOP
2	GO TO DAILY NECESSITIES SHOP

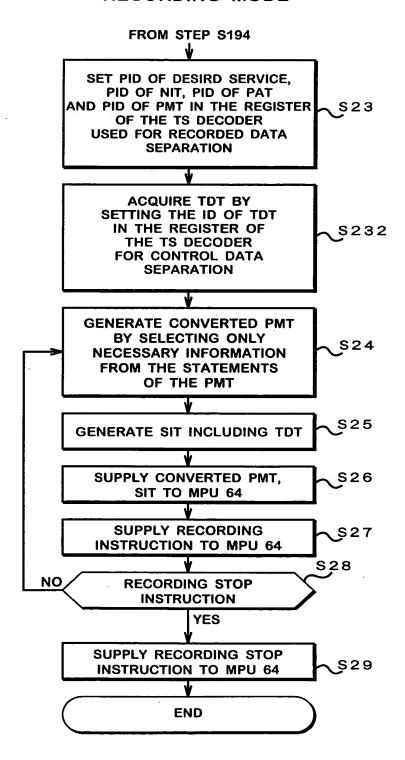
INDEX	CHARACTER SEQUENCE
0	XXXX-8989-90
1	03-1234-XXXX
2	PRODUCT CODE:B-133

FIG.48

OVERALL LAYOUT DIAGRAM OF RECEPTION/RECORDING/REPRODUCTION DEVICE (FIFTH EMBODIMENT)



RECORDING MODE



SCRIPT OF HANDLER DEFFINTION TABLE

IF CONDITION A
(RECORDING DATE AND TIME,
REPRODUCTION DATE AND TIME)
then go to content (index O)
else go to content (index 1)
endif

NAVIGATION DATA NVT1

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FOCUS	-	က	2
NORMAL CONDITION	0	2	4
HANDLER	0	1	2
\	200	400	600
×	200	200	200
INDEX TYPE	BUTTON 500 200	BUTTON 500 400	BUTTON 500 600
INDEX	0	1	2

IIPER LINK TABLE

INDEX	VIDEO	AUDIO	NAVIGATION DATA
0	9600×0	0×009600×0	0×0092
1	0×0097	6600X0/1600X0	0×0093
			н

	CON- DITION	ю	ო	0
HANDLER DEFINITION TABLE	INSTRUCTION (SCRIPT)	send_string(index O, index 2)	send_string(index 1, index 2)	goto_contents(index 1)
HANDLER (INDEX	0	-	2

BITMAP TABLE INDEX

INDEX	DATA (BITMAP DATA)
Ó	ORDER FROM OSAKA CENTER
1	ORDER FROM OSAKA CENTER
2	ORDER FROM TOKYO CENTER
8	ORDER FROM TOKYO CENTER
4	GO TO CLOTHING SHOP
ည	MGO TO CLOTHING SHOP

EXECUTION CONDITION TABLE

10800 MINUTES		CONDITIONAL	4
	23:59 ON 31ST AUGUST, 1998	CONDITIONAL	က
		CONFIRMATION	2
		DENIED	1
		ALLOWED	0
TIME	TIME LIMIT	EXECUTUON ALLOWED	INDEX

CHARACTER SEQUENCE	XXXX-89E9-90	03-1234-XXXX	PRODUCT CODE:A-395
INDEX	0	1	2

NAVIGATION DATA NVT2

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FOCUS CONDITION	-	ო	5
NORMAL CONDITION	0	2	4
HANDLER	0	1	2
٨	200	400	600
×	200	200	500
TYPE	BUTTON 500 200	BUTTON 500 400	BUTTON 500 600
NDEX	0	1	2

HIPER LINK TABLE

NAVIGATION DATA	0×0092	0×0093
AUDIO	8600x09600x0	6600X07600X0
VIDEO	9600×0	7600×0
INDEX	0	-

HANDLER DEFINITION TABLE

INDEX	INSTRUCTION (SCRIPT)	CON- DITION
0	·	က
	send_string(index O, index 2)	
+		က
	send_string(index 1, index 2)	
- 2	goto_contents(Index O)	0

BITMAP TABLE INDEX

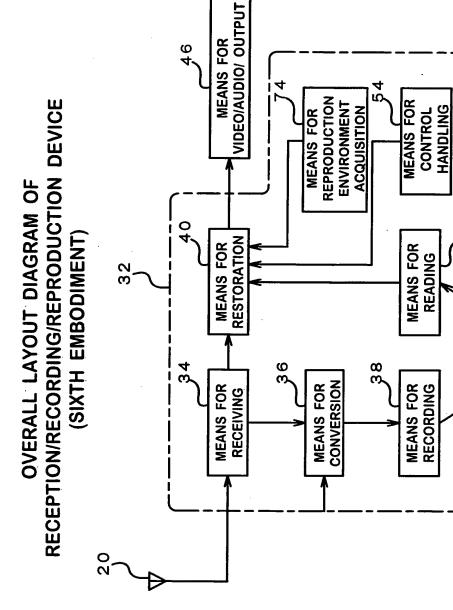
INDEX	DATA (BITMAP DATA)
0	ORDER FROM OSAKA CENTER
1	MORDER FROM OSAKA CENTER
2	ORDER FROM TOKYO CENTER
3	MORDER FROM TOKYO CENTER
4	GO TO DAILY NECESSITIES SHOP
2	GO TO DAILY NECESSITIES SHOP

EXECUTION CONDITION TABLE

10800 MINUTES		CONDITIONAL	4
	23:59 ON 31ST AUGUST, 1998	CONDITIONAL	3
		CONFIRMATION	2
		DENIED	1
		ALLOWED	0
TIME	TIME LIMIT	EXECUTUON ALLOWED	INDEX

CHARACTER SEQUENCE	XXXX-89E9-90	03-1234-XXXX	PRODUCT CODE:B-133
INDEX	0	1	2

FIG.53



RECORDING MEDIUM

NAVIGATION DATA NVT1 (HTML VERSION)

HTML FILE

```
<html>
 <head>
  <script>
   function shopping_osaka() {//SCRIPT FOR ORDERING FROM OSAKA CENTER
     if (MODE == REPRODUCTION)
         Tr = get_record_time():
         Tc = get_current_time();
if (Tc - Tr < 10800) {
                                                                                        210
            send_string("06-6368-XXXX, "PRODUCT CODE":A-395):
      } e|se if (MODE == RECEPTION || MODE == RECORDING) {
        send_string ("06-6368-XXXX, "PRODUCT CODE": A-395);
   function shopping_tokyo() {// SCRIPT FOR ORDERING FROM TOKYO CENTER
     if (MODE == REPRODUCTION) {
         Tr = get_record_time():
         Tc = get_current_time();
if (Tc - Tr < 10800) {
                                                                                         220
            send_string("03-1234-XXXX, "PRODUCT CODE":A-395);
      } else if (MODE == RECEPTION || MODE == RECORDING) {
        send_string ("03-1234-XXXX, "PRODUCT CODE": A-395);
   function goto_clothing_store() {//SCRIPT FOR TRANSFERRING TO CLOTHING SHOP goto_contents("video:0x0097; audio:0x0099; navdata:0x0093");
                                                                                        230
  </script>
 </head>
 <body>
 200
 </body>
</html>
```

BITMAP FILE

bitmap	ORDER FROM	bitmap	ORDER FROM TOKYO CENTER	bitmap	GO TO
0	OSAKA CENTER	2		4	CLOTHING SHOP
bitmap 1	ORDER FROM OSAKA CENTER	bitmap 3	ORDER FROM / TOKYO CENTER	bitmap 5	GO TO CLOTHING SHOP

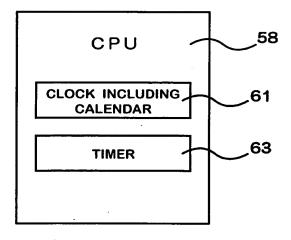
NAVIGATION DATA NVT2 (HTML VERSION)

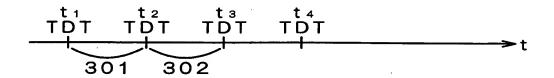
HTML FILE

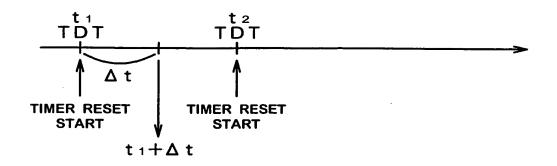
```
<html>
 <head>
  <script>
   function shopping_osaka() {//SCRIPT FOR ORDERING FROM OSAKA CENTER
     if (MODE == REPRODUCTION)
                                    -{
         Tr = get_record_time():
Tc = get_current_time():
if (Tc - Tr < 10800) {</pre>
            send_string("06-6368-XXXX, "PRODUCT CODE":A-395);
      } else if (MODE == RECEPTION || MODE == RECORDING) {
        send_string ("06-6368-XXXX, "PRODUCT CODE":A-395);
   function shopping_tokyo() {// SCRIPT FOR ORDERING FROM TOKYO CENTER
     if (MODE == REPRODUCTION) {
         Tr = get_record_time():
         Tc = get_current_time();
if (Tc - Tr < 10800) {
            send_string("03-1234-XXXX, "PRODUCT CODE":A-395);
      } else if (MODE == RECEPTION || MODE == RECORDING) {
        send_string ("03-1234-XXXX, "PRODUCT CODE":A-395);
   function goto_clothing_store() [//SCRIPT FOR TRANSFERRING TO CLOTHING SHOP goto_contents("video:0x0097; audio:0x0098; navdata:0x0092");
  </script>
 </head>
<body>
 </body>
</html>
```

BITMAP FILE

bitmap	ORDER FROM	bitmap	ORDER FROM	bitmap	GO TO
0	OSAKA CENTER	2	TOKYO CENTER	4	CLOTHING SHOP
bitmap	ORDER FROM OSAKA CENTER	bitmap	ORDER FROM /	bitmap	GO TO
1		3	TOKYO CENTER	5	CLOTHING SHOP







BLOCK DIAGRAM OF RECEPTION/RECODING/REPRODUCTION DEVICE FIG.59

